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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/873,311 | 06/05/2001 | Akihisa Yamazaki | 0879-0317P | 5728 |
| 2292 | 7590 | 01/23/2006 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | TRAN, NHAN T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2615 | |

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|----------------------------------------|--|
| Office Action Summary | Application No. 09/873,311 | Applicant(s) YAMAZAKI ET AL. | |
| | Examiner Nhan T. Tran | Art Unit 2615 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 6, 16, 17, 27, 28, 38, 39 and 50-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 6, 16, 17, 27, 28, 38, 39 and 50-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/27/2005 with respect to claims 2, 6, 50-55 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 10/27/2005 with respect to claims 16, 17, 27, 28, 38 & 39 have been fully considered but they are not persuasive.

Regarding independent claims 16, 27 and 38, the Applicant asserts that Takahashi does not disclose the idea of using "an aperture out of an aperture range for the normal shooting" for a selected shooting mode (e.g., portrait mode). See remarks, pages 12, 13.

In response, the Examiner respectfully disagrees with the Applicant. As stated in the previous Office Action, the aperture for a normal shooting mode (area A) corresponds to aperture F 16 to greater than F 1.4. This is clearly seen from Fig. 9 where the aperture F 1.4 is little out of the normal aperture range for area A. The aperture range for the normal shooting in area A is ended before F 1.4 which belongs to another aperture range for a portrait shooting mode in area B (range from before F 1.4 to F 1.4 or fully open iris). See col. 9, lines 30-42; col. 21, lines 3-6, 35-46 and look-up table shown in Fig. 21 for a portrait mode.

At least in view of the above, the Examiner believes the interpretation of claims 16, 27 and 38 reads on the cited reference to Takahashi.

Specification

3. Amendment to the specification filed 10/27/2005 to correct typo is accepted.

Claim Objections

4. Claim 38 is objected to because of recitation of "a taking lens" in lines 1 & 2 of page 6. "a taking lens" should be changed to --the taking lens--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 16, 17, 27, 28, 38 & 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al (US 5,831,676).

Regarding claim 16, Takahashi discloses a method for controlling an aperture of a camera, comprising the steps of:

determining an aperture (i.e., F 1.4 or fully open) out of an aperture range (F 16 to greater than F 1.4) for a normal shooting (area A) which secures predetermined optical capability (see Fig. 9 and col. 9, lines 30-42); and controlling a diaphragm mechanism (iris 2 and iris driving circuit 14; Fig. 3) to use said aperture according to a

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shooting mode (i.e., portrait mode corresponding to area B and/or C) selected. See col. 21, lines 3-7, 35-47.

Regarding claim 17, see the analysis of claim 16 for the portrait mode.

Regarding claim 27, Takahashi discloses an apparatus for controlling an aperture of a camera (Fig. 3; col. 4, lines 34-45), comprising:

a first determining device (25, 19, 20; Fig. 3) that determines an aperture range (range from F 16 to greater than F 1.4) for a normal shooting (area A) which secures predetermined optical capability (see Fig. 9; col. 6, lines 18-47 and col. 9, lines 30-42);

a second determining device (25, 19, 20) that determines an aperture range (range from before F 1.4 to F 1.4 or fully open) including an aperture (i.e., F 1.4 or fully open) out of the aperture range for the normal shooting (see Fig. 9; col. 9, lines 43-53);

a controlling device (25) that controls a diaphragm mechanism (2, 13, 14; Fig. 3) to set the aperture (i.e., F 1.4 or fully open) within the aperture range determined by said second determining device for the normal shooting according to a shooting mode (i.e., portrait mode) selected. See Fig. 9 and col. 21, lines 3-7, 35-47.

Regarding claim 28, see the analysis of claim 27, wherein the aperture F 1.4 or fully open iris is set according a portrait mode is selected.

Regarding claim 38, see the analysis of claim 27. Additionally, Takahashi discloses a taking lens (lens 1; Fig. 3); a diaphragm mechanism (2, 13, 14) that adjusts an amount of light entering the camera through the taking lens (Fig. 3; col. 4, lines 34-45); and a shooting mode setting device (20, 25; Fig. 3) that sets a shooting mode (i.e., portrait mode). See col. 21, lines 3-7.

Regarding claim 39, see the analysis of claim 38 for a portrait mode selected by the shooting mode setting device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 6, 50, 51, 54 & 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (US 5,831,676) in view of Saruwatari et al (US 6,727,949 B1).

Regarding claim 2, Takahashi discloses an apparatus for controlling an aperture of a camera, comprising:

a first determining device (25, 19, 20; Fig. 3) that determines an aperture range (range from F 16 to greater than F 1.4) for a normal shooting (area A) which secures predetermined optical capability (see Fig. 9; col. 6, lines 18-47 and col. 9, lines 30-42);

a second determining device (25, 19, 20) that determines an aperture range (range from before F 1.4 to F 1.4 or fully open) including an aperture (i.e., F 1.4 or fully open) out of the aperture range for the normal shooting (see Fig. 9; col. 9, lines 43-53);

a controlling device (25) that controls a diaphragm mechanism (2, 13, 14; Fig. 3) to set the aperture (i.e., F 1.4 or fully open) within the aperture range (corresponding to area B or C) determined by said second determining device (Fig. 9; col. 9, lines 43-53).

Takahashi also discloses that the controlling device controls the diaphragm mechanism to set an aperture within the aperture range determined by said first determining device for recording of an image (see Fig. 9; col. 9, lines 38-42 and col. 4, lines 34-54, wherein an aperture within the range F 16 to greater than F 1.4 corresponding to brightness of area A is set for recording an image into a recording medium (8) in a normal shooting condition).

Takahashi does not explicitly teach that the controlling device controls a diaphragm mechanism to set the aperture (i.e., F 1.4 or fully open iris) within the aperture range determined by said second determining device for obtaining video signals of auto focus. As taught by Saruwatari, to accurately perform auto focus and obtain a high quality image, a fully open iris (13) is set by a controller for obtaining video signals of auto focus. After the auto focus is complete, the iris returns to an aperture value larger (smaller aperture size) than the aperture value set during performing auto

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focus for recording an image in a normal shooting condition (see Saruwatari; Fig. 11 and col. 15, lines 20-63).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Takahashi and Saruwatari to construct a camera having auto focus function utilizing fully open iris for obtaining video signals of auto focus during a photographing session so that accurate auto focus and high quality image would be obtained as taught by Saruwatari.

Regarding claim 6, see the analysis of claim 2. Additionally, Takahashi discloses a taking lens (lens 1; Fig. 3); a diaphragm mechanism (2, 13, 14) that adjusts an amount of light entering the camera through the taking lens (Fig. 3; col. 4, lines 34-45).

Regarding claims 50 & 51, it is clear that an operation of obtaining the video signals of the auto focus is performed prior to shooting for recording of the image. See Saruwatari; Fig. 11 and col. 15, lines 33-62 for recording step S408.

Regarding claims 54 & 55, see the analyses of claims 2 & 6, respectively.

7. Claims 52 & 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (US 5,831,676) and Saruwatari et al (US 6,727,949 B1) as applied to claims 50 & 51 and in further view of Kondo (US 5,585,942).

Regarding claims 52 & 53, Takahashi and Saruwatari do not explicitly teach the operation of obtaining the *at least one* of the photometry data of the automatic exposure and the video signals of the auto focus is performed by half-depressing a release button, and the shooting for the recording of the image is performed by fully depressing the release button.

However, Kondo teaches a camera comprising a two-stroke release button (SW1 and SW2) shown in Fig. 3; col. 5, lines 227-30. Kondo further teaches that the camera performs at least automatic exposure utilizing photometry data obtained from an image sensor (3) when the release button is depressed to SW1 (step S4; Fig. 4A). When the release button is further depressed to SW2 (step S29; Fig. 5), an image is captured and recorded into a memory card (step S42 & S43; Fig. 6). See Kondo; Fig. 4A – 6; col. 5, lines 63 – col. 8, line 45.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Kondo into the combined apparatus of Takahashi and Saruwatari to implement a two-stroke release button for performing at least one of auto exposure and auto focus in response to activation of a half-depressed position and further recording an image in response to activation of a full-depressed position so as to provide a better control of the camera with simplified user interface.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.



DAVID OMETZ
SUPERVISORY PATENT EXAMINER